

WHAT IS CLAIMED:

- ~~12B²~~ 1. A former for producing a tissue web, comprising:
a forming element, an inner dewatering belt, and an outer dewatering belt;
the inner and outer belts converging to form a stock inlet nip;
the inner and outer belts being guided over the forming element and thereafter
separating from one another in the area of a separation point; and
at least one suction element positioned adjacent the inner belt on a side which
is opposite the outer belt.
2. The former of claim 1, wherein at least the outer belt is a dewatering wire
having zonally variable wire permeability.
3. The former of claim 1, wherein the tissue web is separated from the outer
belt in the area of the separation point.
4. The former of claim 3, wherein the tissue web is retained by the inner wire
after being separated from the outer belt.
5. The former of claim 1, wherein at least one of the inner and outer belts
comprises a circulating continuous dewatering belt.
6. The former of claim 1, wherein the forming element comprises a forming
roll.
7. The former of claim 1, wherein each of the inner and outer belts is a
circulating continuous dewatering wire having zonally variable wire permeability.
8. The former of claim 1, wherein the inner belt contacts the forming element
and the outer belt is guided with the inner belt around the forming element such that
the outer belt does not come into contact with the forming element.
9. The former of claim 1, wherein the forming element comprises the at least
one suction element.

10. The former of claim 9, wherein the forming element comprises a suction zone.

11. The former of claim 1, wherein the at least one suction element is positioned adjacent the area of the separation point.

12. The former of claim 11, wherein the at least one suction element is provided inside a loop of the inner belt.

13. The former of claim 1, wherein the at least one suction element comprises a vacuum suction element and wherein the vacuum present inside the suction element is adjustable.

14. The former of claim 1, wherein the at least one suction element is positioned in front of the separation point, in a web travel direction.

15. The former of claim 1, wherein the at least one suction element causes the inner belt to separate from the outer belt.

16. The former of claim 1, wherein the at least one suction element is arranged at least essentially over an entire width of one of the inner belt and the tissue web.

17. The former of claim 1, further comprising at least one blowing element positioned adjacent the outer belt on a side which is opposite the inner belt.

18. The former of claim 17, wherein the at least one blowing element is located in the area of the separation point.

19. The former of claim 17, wherein the at least one blowing element is located in the area of the separation point and inside a loop of the outer belt.

20. The former of claim 17, wherein the at least one blowing element is arranged at least essentially over an entire width of one of the outer belt and the tissue web.

21. The former of claim 1, wherein the forming element comprises a suction zone having adjustable vacuum.

22. A former for producing a tissue web, comprising:
a forming element, an inner dewatering belt, and an outer dewatering belt;
the inner and outer belts converging to form a stock inlet nip;
the inner and outer belts being guided over the forming element and thereafter
separating from one another in the area of a separation point; and
a conditioning device positioned adjacent the outer belt.

23. The former of claim 22, wherein at least one of the inner belt and the outer belt is a dewatering wire having zonally variable wire permeability.

24. The former of claim 22, further comprising at least one suction element positioned adjacent the inner belt on a side which is opposite the outer belt.

25. The former of claim 22, wherein the tissue web is separated from the outer belt in the area of the separation point.

26. The former of claim 25, wherein the tissue web is retained by the inner wire after being separated from the outer belt.

27. The former of claim 22, wherein at least one of the inner and outer belts comprises a circulating continuous dewatering belt.

28. The former of claim 22, wherein the forming element comprises a forming roll.

29. The former of claim 22, wherein each of the inner and outer belts is a circulating continuous dewatering wire having zonally variable wire permeability.

30. The former of claim 22, wherein the inner belt contacts the forming element and the outer belt is guided with the inner belt around the forming element such that the outer belt does not come into contact with the forming element.

31. The former of claim 22, wherein the forming element comprises the at least one suction element.

32. The former of claim 31, wherein the forming element comprises a suction zone.

33. The former of claim 22, further comprising at least one suction element positioned adjacent the area of the separation point.

34. The former of claim 33, wherein the at least one suction element is provided inside a loop of the inner belt.

35. The former of claim 33, wherein the at least one suction element comprises a vacuum suction element and wherein the vacuum present inside the suction element is adjustable.

36. The former of claim 33, wherein the at least one suction element is positioned in front of the separation point, in a web travel direction.

37. The former of claim 33, wherein the at least one suction element causes the inner belt to separate from the outer belt.

38. The former of claim 33, wherein the at least one suction element is arranged at least essentially over an entire width of one of the inner belt and the tissue web.

39. The former of claim 22, further comprising at least one blowing element positioned adjacent the outer belt on a side which is opposite the inner belt.

40. The former of claim 39, wherein the at least one blowing element is located in the area of the separation point.

41. The former of claim 39, wherein the at least one blowing element is located in the area of the separation point and inside a loop of the outer belt.

42. The former of claim 39, wherein the at least one blowing element is arranged at least essentially over an entire width of one of the outer belt and the tissue web.

43. The former of claim 22, wherein the forming element comprises a suction zone having adjustable vacuum.

44. The former of claim 22, wherein the conditioning device comprises a wire cleaning device.

45. The former of claim 44, wherein the conditioning device is arranged at least essentially over an entire width of one of the outer belt and the tissue web.

46. The former of claim 44, wherein the inner belt is a felt belt.

47. The former of claim 22, wherein the former is a crescent former.

48. A process for producing a tissue web in a former which includes a forming element, an inner dewatering belt, and an outer dewatering belt, the inner and outer belts converging to form a stock inlet nip, the inner and outer belts being guided over the forming element and thereafter separating from one another in the area of a separation point, and at least one suction element positioned adjacent the inner belt on a side which is opposite the outer belt, the process comprising:

forming the tissue web in the area of the forming element;

guiding the inner and outer belts around the forming element; and

separating the inner and outer belts in the area of the separation point.

49. The process of claim 48, wherein the separating comprises separating the outer belt from the inner belt.

50. The process of claim 48, wherein the separating comprises suctioning the inner belt via the at least one suction element which is positioned inside a loop.

51. The process of claim 48, wherein the separating comprises suctioning the inner belt via the forming element, the forming element comprising the at least one suction element having a suction zone.

52. The process of claim 48, wherein the separating comprises suctioning the inner belt in front of the separation point, in the web travel direction.

53. The process of claim 48, wherein the separating comprises suctioning the inner belt via the at least one suction element arranged at least essentially over an entire width of one of the tissue web and the inner belt.

54. The process of claim 48, further comprising blowing a medium against the outer belt using a blowing element positioned adjacent the outer belt in the area of the separation point.

55. The process of claim 54, wherein the blowing comprises blowing a medium against the outer belt via the at least one blowing element arranged at least essentially over an entire width of one of the tissue web and the outer belt.

~~55. The process of claim 54, wherein the blowing element is positioned inside a loop of the outer belt in the area of the separation point.~~

56. A process for producing a tissue web in a former which includes a forming element, an inner dewatering belt, and an outer dewatering belt, the inner and outer belts converging to form a stock inlet nip, the inner and outer belts being guided over the forming element and thereafter separating from one another in the area of a separation point, and a conditioning device positioned adjacent the outer belt, the process comprising:

forming the tissue web in the area of the forming element;
guiding the inner and outer belts around the forming element; and
conditioning the outer belt.

57. The process of claim 56, further comprising separating the inner and outer belts in the area of the separation point.

58. The process of claim 57, wherein the separating comprises separating the outer belt from the inner belt.

59. The process of claim 57, wherein the separating comprises suctioning the inner belt via the at least one suction element which is positioned inside a loop.

60. The process of claim 57, wherein the separating comprises suctioning the inner belt via the forming element, the forming element comprising the at least one suction element having a suction zone.

61. The process of claim 57, wherein the separating comprises suctioning the inner belt in front of the separation point, in the web travel direction.

62. The process of claim 57, wherein the separating comprises suctioning the inner belt via the at least one suction element arranged at least essentially over an entire width of one of the tissue web and the inner belt.

63. The process of claim 56, further comprising blowing a medium against the outer belt using a blowing element positioned adjacent the outer belt in the area of the separation point.

64. The process of claim 63, wherein the blowing comprises blowing a medium against the outer belt via the at least one blowing element arranged at least essentially over an entire width of one of the tissue web and the outer belt.

65. The process of claim 64, wherein the blowing element is positioned inside a loop of the outer belt in the area of the separation point.

66. The process of claim 56, wherein the former comprises a crescent former in which the inner belt is a felt belt.

67. The process of claim 56, wherein at least the outer belt is a dewatering wire having zonally variable wire permeability.

48,368 68. A former for producing a tissue web, comprising:

a forming roll, an inner continuous dewatering belt, and an outer continuous dewatering belt;

the inner and outer belts converging to form a stock inlet nip;

a headbox positioned adjacent the stock inlet nip;

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each of the inner and outer belts forming corresponding inner and outer continuous loops which are each guided over a plurality of guide rolls;

each of the inner and outer belts being guided over the forming roll and thereafter separating from one another in the area of a separation point; and

one of:

at least one suction element positioned inside the inner loop and adjacent the inner belt on a side which is opposite the outer belt; and

a conditioning device positioned adjacent so as to clean the outer belt,

wherein at least one of the inner and the outer belts is a dewatering wire having zonally variable wire permeability.

49 ~~69~~. The former of claim ~~68~~⁴⁸, further comprising:

a press nip through which the tissue web and the inner belt is guided, the press nip being formed between a cylinder and shoe press roll,

wherein the tissue web is removed from the inner belt after passing through the press nip.

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